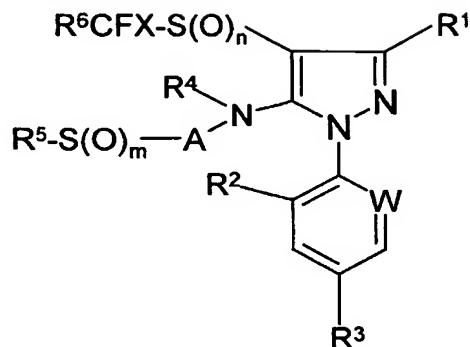


## CLAIMS

1. A compound of formula (I):



(I)

wherein:

R<sup>1</sup> is CSNH<sub>2</sub>;

W is C-halogen or N;

R<sup>2</sup> is hydrogen or Cl;

10 R<sup>3</sup> is CF<sub>3</sub>, OCF<sub>3</sub> or SF<sub>5</sub>;

R<sup>4</sup> is hydrogen, (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-haloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>2</sub>-C<sub>6</sub>)-haloalkynyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, CO<sub>2</sub>-(C<sub>3</sub>-C<sub>6</sub>)-alkenyl, CO<sub>2</sub>-(C<sub>3</sub>-C<sub>6</sub>)-alkynyl, -CO<sub>2</sub>-(CH<sub>2</sub>)<sub>q</sub>-R<sup>7</sup>, -CH<sub>2</sub>R<sup>7</sup>, -CH<sub>2</sub>R<sup>9</sup>, OR<sup>7</sup>, OR<sup>8</sup>, COCO<sub>2</sub>R<sup>10</sup> or COCONR<sup>10</sup>R<sup>11</sup>; or CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy and (C<sub>1</sub>-C<sub>3</sub>)-alkylthio; or (C<sub>1</sub>-C<sub>6</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, S(O)<sub>p</sub>R<sup>8</sup> and CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl;

A is (C<sub>1</sub>-C<sub>6</sub>)-alkylene or (C<sub>1</sub>-C<sub>6</sub>)-haloalkylene;

20 R<sup>5</sup> is (C<sub>2</sub>-C<sub>6</sub>)-alkenyl, (C<sub>2</sub>-C<sub>6</sub>)-haloalkenyl, (C<sub>2</sub>-C<sub>6</sub>)-alkynyl, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl or - (CH<sub>2</sub>)<sub>q</sub>R<sup>7</sup>; or (C<sub>1</sub>-C<sub>6</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, S(O)<sub>p</sub>R<sup>8</sup> and CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl;

X is F or Cl;

25 R<sup>6</sup> is F, Cl or Br;

R<sup>7</sup> is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup>, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, COR<sup>8</sup>, NR<sup>12</sup>R<sup>13</sup> and OH;

R<sup>8</sup> is (C<sub>1</sub>-C<sub>6</sub>)-alkyl or (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl;

- 5 R<sup>9</sup> is a heteroaromatic radical having 5 or 6 ring atoms and 1, 2 or 3 hetero atoms in the ring selected from the group consisting of N, O and S, unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>4</sub>)-alkyl, (C<sub>1</sub>-C<sub>4</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>4</sub>)-alkoxy, (C<sub>1</sub>-C<sub>4</sub>)-haloalkoxy, NO<sub>2</sub>, CN, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub>)-alkyl, S(O)<sub>p</sub>R<sup>8</sup> and OH;

- 10 R<sup>10</sup> and R<sup>11</sup> are each independently H or R<sup>5</sup>;  
or the radical NR<sup>10</sup>R<sup>11</sup> forms a five- to seven-membered saturated ring which optionally contains an additional hetero atom in the ring which is selected from O, S and N, the ring being unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-haloalkyl and CO<sub>2</sub>-(C<sub>1</sub>-  
15 C<sub>6</sub>)-alkyl;

R<sup>12</sup> and R<sup>13</sup> are each independently H or (C<sub>1</sub>-C<sub>6</sub>)-alkyl;

m, n and p are each independently zero, one or two; and

q is zero or one;

or a pesticidally acceptable salt thereof.

20

2. A compound or a salt thereof as claimed in claim 1 wherein R<sup>6</sup> and X are both F.

3. A compound or a salt thereof as claimed in claim 1 or 2 wherein R<sup>1</sup> is

25 CSNH<sub>2</sub>;

W is C-Cl;

R<sup>2</sup> is Cl;

R<sup>3</sup> is CF<sub>3</sub> or OCF<sub>3</sub>;

R<sup>4</sup> is (C<sub>2</sub>-C<sub>4</sub>)-alkenyl, (C<sub>2</sub>-C<sub>4</sub>)-alkynyl, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl,

30 CO<sub>2</sub>-(C<sub>3</sub>-C<sub>4</sub>)-alkenyl, CO<sub>2</sub>-(C<sub>3</sub>-C<sub>4</sub>)-alkynyl or -CO<sub>2</sub>-(CH<sub>2</sub>)<sub>q</sub>-R<sup>7</sup>; or (C<sub>1</sub>-C<sub>3</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group

consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, (C<sub>1</sub>-C<sub>3</sub>)-haloalkoxy, (C<sub>3</sub>-C<sub>7</sub>)-cycloalkyl, S(O)<sub>p</sub>R<sup>8</sup> and CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl;

A is (C<sub>1</sub>-C<sub>4</sub>)-alkylene or (C<sub>1</sub>-C<sub>4</sub>)-haloalkylene;

R<sup>5</sup> is (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl or -(CH<sub>2</sub>)<sub>q</sub>R<sup>7</sup>; or (C<sub>1</sub>-C<sub>3</sub>)-alkyl unsubstituted or substituted

5 by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, (C<sub>1</sub>-C<sub>3</sub>)-haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl, S(O)<sub>p</sub>R<sup>8</sup> and CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl;

X is F or Cl;

R<sup>6</sup> is F or Cl;

R<sup>7</sup> is phenyl unsubstituted or substituted by one or more radicals selected from the

10 group consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkyl, (C<sub>1</sub>-C<sub>3</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, (C<sub>1</sub>-C<sub>3</sub>)-haloalkoxy, CN, NO<sub>2</sub>, S(O)<sub>p</sub>R<sup>8</sup>, CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl, COR<sup>8</sup>, NR<sup>12</sup>R<sup>13</sup> and OH;

R<sup>8</sup> is (C<sub>1</sub>-C<sub>3</sub>)-alkyl or (C<sub>1</sub>-C<sub>3</sub>)-haloalkyl;

R<sup>12</sup> and R<sup>13</sup> are each independently H or (C<sub>1</sub>-C<sub>3</sub>)-alkyl;

m, n and p are each independently zero, one or two; and

15 q is zero or one.

4. A compound or a salt thereof as claimed in any one of claims 1, 2 or 3 wherein R<sup>1</sup> is CSNH<sub>2</sub>;

W is C-Cl;

20 R<sup>2</sup> is Cl;

R<sup>3</sup> is CF<sub>3</sub> or OCF<sub>3</sub>;

R<sup>4</sup> is CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl, CO<sub>2</sub>-(C<sub>3</sub>-C<sub>4</sub>)-alkenyl, CO<sub>2</sub>-(C<sub>3</sub>-C<sub>4</sub>)-alkynyl or -CO<sub>2</sub>-(CH<sub>2</sub>)<sub>q</sub>-R<sup>7</sup>; or (C<sub>1</sub>-C<sub>3</sub>)-alkyl;

A is (C<sub>1</sub>-C<sub>4</sub>)-alkylene;

25 R<sup>5</sup> is (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl or -(CH<sub>2</sub>)<sub>q</sub>R<sup>7</sup>; or (C<sub>1</sub>-C<sub>3</sub>)-alkyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, (C<sub>1</sub>-C<sub>3</sub>)-haloalkoxy, (C<sub>3</sub>-C<sub>6</sub>)-cycloalkyl, S(O)<sub>p</sub>R<sup>8</sup> and CO<sub>2</sub>-(C<sub>1</sub>-C<sub>3</sub>)-alkyl;

X is F or Cl;

R<sup>6</sup> is F or Cl;

30 R<sup>7</sup> is phenyl unsubstituted or substituted by one or more radicals selected from the group consisting of halogen, (C<sub>1</sub>-C<sub>3</sub>)-alkyl, (C<sub>1</sub>-C<sub>3</sub>)-haloalkyl, (C<sub>1</sub>-C<sub>3</sub>)-alkoxy, (C<sub>1</sub>-C<sub>3</sub>)-haloalkoxy, CN, NO<sub>2</sub> and S(O)<sub>p</sub>R<sup>8</sup>;

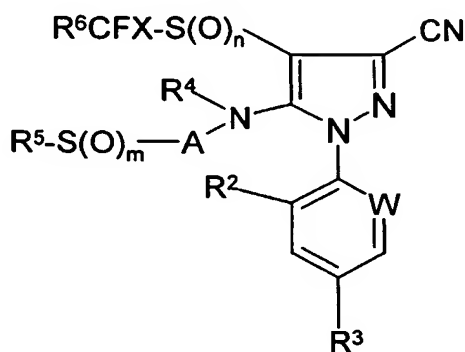
$R^8$  is  $(C_1-C_3)$ -alkyl or  $(C_1-C_3)$ -haloalkyl;

$m$ ,  $n$  and  $p$  are each independently zero, one or two; and

$q$  is zero or one.

5. A process for the preparation of a compound of formula (I) or a salt thereof as defined in any one of claims 1 to 4, which process comprises:

a) where  $R^1$  is  $CSNH_2$ , and  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $W$ ,  $A$ ,  $X$ ,  $m$  and  $n$  are as defined in claim 1, reacting a compound of formula (II):



(II)

wherein  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $W$ ,  $A$ ,  $X$ ,  $m$  and  $n$  are as defined in formula (I), with an alkali or alkaline earth metal hydrosulfide; or

b) where  $R^1$  is  $CSNH_2$ , and  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^5$ ,  $R^6$ ,  $W$ ,  $A$ ,  $X$ ,  $m$  and  $n$  are as defined in claim 1, reacting a compound of formula (II) as defined above with a

bis(trialkylsilyl)sulfide, in the presence of a base; and

(c) if desired, converting a resulting compound of formula (I) into a pesticidally acceptable salt thereof.

6. A pesticidal composition comprising a compound of formula (I) or a pesticidally acceptable salt thereof as defined in any one of claims 1 to 4, in association with a pesticidally acceptable diluent or carrier and/or surface active agent.

7. The use of a compound of formula (I) or a salt thereof according to any one of claims 1 to 4 or of a composition according to claim 6, for the preparation of a veterinary medicament.

8. The use of a compound of formula (I) or a salt thereof according to any one of claims 1 to 4 or of a composition according to claim 6, for the control of pests.

- 5 9. A method for controlling pests at a locus which comprises applying thereto an effective amount of a compound of formula (I) or a salt thereof as claimed in any one of claims 1 to 4 or of a composition according to claim 6.